	Application No.	Applicant(s)
Notice of Allowability	09/645,386	DAY ET AL.
	Examiner	Art Unit
	Benjamin R Bruckart	2155
The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT F of the Office or upon petition by the applicant. See 37 CFR 1.31	S (OR REMAINS) CLOSED in the S) or other appropriate communi RIGHTS. This application is sub	is application. If not included cation will be mailed in due course. THIS
1. \boxtimes This communication is responsive to <u>8-19-04</u> .		
2. $oxed{\boxtimes}$ The allowed claim(s) is/are <u>2,4-20,22,24-38,40 and 42-52</u>	2.	
3. $igotimes$ The drawings filed on <u>8-24-04</u> are accepted by the Exam	ner.	
 4. Acknowledgment is made of a claim for foreign priority of a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority of International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE noted below. Failure to timely comply will result in ABANDON 	we been received. We been received in Application I Ocuments have been received in " of this communication to file a	No In this national stage application from the
 THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which girls. 		
6. CORRECTED DRAWINGS (as "replacement sheets") mi		
(a) ☐ including changes required by the Notice of Draftspe	rson's Patent Drawing Review (PTO-948) attached
1) hereto or 2) to Paper No./Mail Date		U 055 15 1
(b) ☐ including changes required by the attached Examine Paper No./Mail Date	r's Amendment / Comment or in	the Office action of
Identifying indicia such as the application number (see 37 CFR each sheet. Replacement sheet(s) should be labeled as such in	1.84(c)) should be written on the the header according to 37 CFR	drawings in the front (not the back) of 1.121(d).
 DEPOSIT OF and/or INFORMATION about the dep attached Examiner's comment regarding REQUIREMENT 		
Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 6. ⊠ Interview Sum	
3. Information Disclosure Statements (PTO-1449 or PTO/SB		Paper No./Mail Date <u>20040819</u> . 7. ⊠ Examiner's Amendment/Comment
Paper No./Mail Date 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. ⊠ Examiner's St 9. □ Other	atement of Reasons for Allowance
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EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview and email with David Victor on 8/19/2004.

The application has been amended as follows:

In the claims:

1. (Cancelled)

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- 2. The method of claim 5, wherein the customizable settings include parameters and access methods unique to an arrangement of content in the content provider's data repository, wherein the access methods process the accessed content page using the parameter.
 - 3. (Cancelled)
- 4. The method of claim 5, wherein the addressable locations comprise uniform resource locator (URL) addresses.
- 5. A method for searching data repositories managed by different content providers to gather indexable metadata on content at addressable locations at the data repositories, comprising:

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accessing customizable settings capable of being customized by the content provider, wherein the customizable settings provide an addressable location of at least one content page in the data repository a parameter comprising a query term for at least one included addressable location;

for each provided addressable location for which there is a query term, accessing the content page at the addressable location at the content provider's data repository indicated in the customizable settings;

processing the accessed content page using the provided query term at each provided addressable location to obtain query results; and

generating metadata from the obtained query results to add to an index of metadata for accessed addressable locations at the data repository, wherein customizable settings from the different content providers are accessed to generate the metadata for the accessed content pages, and wherein the index of metadata includes metadata on content from the data repositories of the different content providers.

6. The method of claim 5, wherein the accessed customizable settings further provide qualifiers for at least one query term, further comprising:

for each query term having at least one qualifier, determining whether the query results for the query term satisfy each qualifier for the query term, wherein the metadata for the query result is generated if the query result satisfies each qualifier for the query term that generated the query result; and

performing a non-qualifying action for each query result that does not satisfy each qualifier.

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7. The method of claim 6, wherein the non-qualifying action comprises not including metadata for the query result in the index.

8. A method for searching data repositories managed by different content providers to gather indexable metadata on content at addressable locations at the data repositories, comprising:

accessing customizable settings capable of being customized by the content provider, wherein the customizable settings provide an addressable location of at least one content page in the data repository and parameters for the addressable locations, wherein the parameters in the accessed customizable settings further include a password for at least one provided addressable location;

accessing the content page at the addressable location at the content provider's data repository indicated in the customizable settings;

using the provided password to access the content page at the indicated addressable location for which the password is provided;

processing the accessed content page using the parameter provided for the addressable location of the accessed content page to generate output information; and

generating metadata indicating the generated output information for the accessed content page to add to an index of metadata for accessed addressable locations at the data repository, wherein customizable settings from the different content providers are accessed to generate the metadata for the accessed content pages, and wherein the index

of metadata includes metadata on content from the data repositories of the different content providers.

9. The method of claim 5, wherein the parameters in the accessed customizable settings further include a recursive search setting indicating whether to search hypertext links to linked addressable locations included in the accessed content page, further comprising:

accessing a content page at each linked addressable location included if the recursive search setting indicates to recursively search linked addressable locations, wherein metadata is generated for each content page recursively accessed at the linked addressable locations in the accessed content page.

- 10. The method of claim 9, wherein the accessed customizable settings further provide prohibited addressable locations at the data repository, wherein metadata is not generated for each content page at a linked addressable location that is one indicated prohibited address location.
- 11. A method for searching data repositories managed by different content providers to gather indexable metadata on content at addressable locations at the data repositories, comprising:

accessing customizable settings capable of being customized by the content provider, wherein the customizable settings provide an addressable location of at least one content page in the data repository and further indicate validation checking programs; data repository indicated in the customizable settings;

executing each validation checking program indicated in the accessed customizable settings against each accessed content page;

generating a validation output result with the validation checking program for each accessed content page with each validation checking program describing characteristics of the content page; and

generating metadata from the validation output result to add to an index of metadata for accessed addressable locations at the data repository, wherein customizable settings from the different content providers are accessed to generate the metadata for the accessed content pages, and wherein the index of metadata includes metadata on content from the data repositories of the different content providers.

12. The method of claim 11, wherein the accessed customizable settings further indicate at least one parameter to use with at least one validation checking program, further comprising:

using the at least one parameter when executing the validation checking program, wherein the validation output result further indicates characteristics of the content page related to the at least one parameter used with the validation checking program.

13. The method of claim 11, wherein the parameters in the accessed customizable settings further indicate at least one qualifier to use with at least one validation checking program, further comprising:

determining whether the validation output result satisfies the at least one qualifier provided with the validation checking program producing the output result, wherein metadata for the output result is included in the index if the output result satisfies the qualifier.

- 14. The method of claim 13, wherein metadata for the content page at the addressable location is not included in the index if the validation output result does not satisfy the qualifier.
 - 15. The method of claim 5, further comprising:

determining a format of the accessed content page;

selecting one of a plurality of parsers capable of parsing the determined format;

and

parsing the content page using the selected parser, wherein the metadata to add to the index is generated from the parsed content page.

16. The method of claim 5, further comprising:

determining a parser capable of parsing an embedded file referenced in the content page;

parsing the content of the referenced embedded file; and

generating metadata for the parsed content of the embedded file to add to the index.

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17. The method of claim 16, wherein the embedded file is encoded in a multimedia format.

18. The method of claim 5, further comprising:

distributing a collection tool to content providers capable of accessing and generating metadata for content provider data repositories using the accessed customizable settings; and

collecting metadata data gathered from multiple content providers using the collection tool to gather metadata on their data repositories.

- 19. The method of claim 18, further comprising commercializing the collected metadata.
- 20. The method of claim 18, further comprising: receiving an electronic subscription from content providers to use the collection tool and provide metadata.

21. (Cancelled)

22. The system of claim 25, wherein the customizable settings include parameters and access methods unique to an arrangement of content in the content provider's data repository, wherein the access methods process the accessed content page using the parameter.

23. (Cancelled)

- 24. The system of claim 25, wherein the addressable locations comprise uniform resource locator (URL) addresses.
- 25. A system for searching data repositories managed by different content providers to gather indexable metadata on content at addressable locations at the data repositories, comprising:

means for accessing customizable settings capable of being customized by the content provider, wherein the customized settings provide an addressable location of at least one content page in the data repository and a parameter in the accessed customizable settings comprising a query term for at least one included addressable location;

means for accessing the content page at each provided addressable location at the content provider's data repository indicated in the customizable settings;

means for processing each accessed content page using the provided query term at the provided addressable location to obtain query results for each provided addressable location for which there is a query term; and

means for generating metadata from the obtained query results to add to the an index of metadata for accessed addressable locations at the data repository, wherein customizable settings from the different content providers are accessed to generate the metadata for the accessed content pages, and wherein the index of metadata includes metadata on content from the data repositories of the different content providers.

26. (Currently Amended) The system of claim 25, wherein the accessed customizable settings further provide qualifiers for at least one query term, further comprising:

means for determining whether the query results for the query term satisfy each qualifier for the query term for each query term having at least one qualifier, wherein the metadata for the query result is generated if the query result satisfies each qualifier for the query term that generated the query result; and

means for performing a non-qualifying action for each query result that does not satisfy each qualifier.

- 27. (Original) The system of claim 26, wherein the non-qualifying action comprises not including metadata for the query result in the index.
- 28. A system for searching data repositories managed by different content providers to gather indexable metadata on content at addressable locations at the data repositories, comprising:

means for accessing customizable settings capable of being customized by the content provider, wherein the customized settings provide an addressable location of at least one content page in the data repository and parameters for the addressable locations, wherein the parameters in the accessed customizable settings further include a password for at least one provided addressable location;

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means for accessing the content page at the addressable location at the content provider's data repository indicated in the customizable settings;

means for using the provided password to access the content page at the indicated addressable location for which the password is provided;

means for processing the accessed content page using the parameter provided for the addressable location of the accessed content page to generate output information; and means for generating metadata indicating the generated output information for the accessed content page to add to an index of metadata for accessed addressable locations at the data repository, wherein customizable settings from the different content providers are accessed to generate the metadata for the accessed content pages, and wherein the index of metadata includes metadata on content from the data repositories of the different content providers.

29. The system of claim 25, wherein the parameters in the accessed customizable settings further include a recursive search setting indicating whether to search hypertext links to linked addressable locations included in the accessed content page, further comprising:

means for accessing a content page at each linked addressable location included if the recursive search setting indicates to recursively search linked addressable locations, wherein metadata is generated for each content page recursively accessed at the linked addressable locations in the accessed content page.

- 30. The system of claim 29, wherein the accessed customizable settings further provide prohibited addressable locations at the data repository, wherein metadata is not generated for each content page at a linked addressable location that is one indicated prohibited address location.
- 31. A system for searching data repositories managed by different content providers to gather indexable metadata on content at addressable locations at the data repositories, comprising:

means for accessing customizable settings capable of being customized by the content provider, wherein the customized settings provide an addressable location of at least one content page in the data repository and further indicate validation checking programs;

means for accessing the content page at the addressable location at the content provider's data repository indicated in the customizable settings;

means for executing each validation checking program indicated in the accessed customizable settings against each accessed content page;

means for generating a validation output result with the validation checking program for each accessed content page with each validation checking program describing characteristics of the content page; and

means for generating metadata from the validation output result to add to the an index of metadata for accessed addressable locations at the data repository, wherein customizable settings from the different content providers are accessed to generate the

metadata for the accessed content pages, and wherein the index of metadata includes metadata on content from the data repositories of the different content providers.

32. The system of claim 31, wherein the accessed customizable settings further indicate at least one parameter to use with at least one validation checking program, further comprising:

means for using the at least one parameter when executing the validation checking program, wherein the validation output result further indicates characteristics of the content page related to the at least one parameter used with the validation checking program.

33. The system of claim 31, wherein the accessed customizable settings further indicate at least one qualifier to use with at least one validation checking program, further comprising:

means for determining whether the validation output result satisfies the at least one qualifier provided with the validation checking program producing the output result, wherein metadata for the output result is included in the index if the output result satisfies the qualifier.

34. The system of claim 33, wherein metadata for the content page at the addressable location is not included in the index if the validation output result does not satisfy the qualifier.

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35. The system of claim 25, further comprising:

means for determining a format of the accessed content page;

means for selecting one of a plurality of parsers capable of parsing the determined format; and

means for parsing the content page using the selected parser, wherein the metadata to add to the index is generated from the parsed content page.

36. The system of claim 25, further comprising:

means for determining a parser capable of parsing an embedded file referenced in the content page;

means for parsing the content of the referenced embedded file; and
means for generating metadata for the parsed content of the embedded file to add
to the index.

- 37. The system of claim 36, wherein the embedded file is encoded in a multimedia format.
 - 38. The system of claim 25, further comprising:

means for distributing a collection tool to content providers capable of accessing and generating metadata for content provider data repositories using the accessed customizable settings; and

means for collecting metadata data gathered from multiple content providers using the collection tool to gather metadata on their data repositories.

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39. (Cancelled)

40. The program of claim 43, wherein the customized settings include parameters and access methods unique to an arrangement of content in the content provider's data repository, wherein the access methods process the accessed content page

41. (Cancelled)

using the parameter.

- 42. The program of claim 43, wherein the addressable locations comprise uniform resource locator (URL) addresses.
- 43. A program for searching data repositories managed by different content providers to gather indexable metadata on content at addressable locations at the data repositories, wherein the program comprises code implemented in a computer readable medium capable of causing a computer to perform:

accessing customizable settings capable of being customized by the content provider, wherein the customizable settings provide an addressable location of at least one content page in the data repository and a parameter in the accessed customizable settings comprising a query term for at least one included addressable location;

for each provided addressable location for which there is a query term, accessing the content page at the addressable location at the content provider's data repository indicated in the customizable settings;

processing the accessed content page using the provided query term at each provided addressable location to obtain query results; and

generating metadata from the obtained query results to add to an index of metadata for accessed addressable locations at the data repository, wherein customizable settings from the different content providers are accessed to generate the metadata for the accessed content pages, and wherein the index of metadata includes metadata on content from the data repositories of the different content providers.

44. The program of claim 43, wherein the accessed customizable settings further provide qualifiers for at least one query term, wherein the program is further capable of causing the computer to perform:

for each query term having at least one qualifier, determining whether the query results for the query term satisfy each qualifier for the query term, wherein the metadata for the query result is generated if the query result satisfies each qualifier for the query term that generated the query result; and

performing a non-qualifying action for each query result that does not satisfy each qualifier.

45. The program of claim 44, wherein the non-qualifying action comprises not including metadata for the query result in the index.

A program for searching data repositories managed by different content providers to gather indexable metadata on content at addressable locations at the data repositories, wherein the program comprises code implemented in a computer readable medium capable of causing a computer to perform:

accessing customizable settings capable of being customized by the content provider, wherein the customizable settings provide an addressable location of at least one content page in the data repository and parameters for the addressable locations, wherein the parameters in the accessed customizable settings further include a password for at least one provided addressable location;

accessing the content page at the addressable location at the content provider's data repository indicated in the customizable settings;

using the provided password to access the content page at the indicated addressable location for which the password is provided;

processing the accessed content page using the parameter provided for the addressable location of the accessed content page to generate output information; and

generating metadata indicating the generated output information for the accessed content page to add to an index of metadata for accessed addressable locations at the data repository, wherein customizable settings from the different content providers are accessed to generate the metadata for the accessed content pages, and wherein the index of metadata includes metadata on content from the data repositories of the different content providers.

47. The program of claim 43, wherein the parameters in the accessed customizable settings further include a recursive search setting indicating whether to search hypertext links to linked addressable locations included in the accessed content page, wherein the program is further capable of causing the computer to perform:

accessing a content page at each linked addressable location included if the recursive search setting indicates to recursively search linked addressable locations, wherein metadata is generated for each content page recursively accessed at the linked addressable locations in the accessed content page.

- 48. The program of claim 47, wherein the accessed customizable settings further provide prohibited addressable locations at the data repository, wherein metadata is not generated for each content page at a linked addressable location that is one indicated prohibited address location.
- 49. A program for searching data repositories managed by different content providers to gather indexable metadata on content at addressable locations at the data repositories, wherein the program comprises code implemented in a computer readable medium capable of causing a computer to perform:

accessing customizable settings capable of being customized by the content provider, wherein the customizable settings provide an addressable location of at least one content page in the data repository and further indicate validation checking programs;

accessing the content page at the addressable location at the content provider's data repository indicated in the customizable settings;

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executing each validation checking program indicated in the accessed customizable settings against each accessed content page;

generating a validation output result with the validation checking program for each accessed content page with each validation checking program describing characteristics of the content page; and

generating metadata from the validation output result to add to an index of metadata for accessed addressable locations at the data repository, wherein customizable settings from the different content providers are accessed to generate the metadata for the accessed content pages, and wherein the index of metadata includes metadata on content from the data repositories of the different content providers.

50. The program of claim 49, wherein the accessed customizable settings further indicate at least one parameter to use with at least one validation checking program, wherein the program is further capable of causing the computer to perform:

using the at least one parameter when executing the validation checking program, wherein the validation output result further indicates characteristics of the content page related to the at least one parameter used with the validation checking program.

51. The program of claim 49, wherein the accessed customizable settings further indicate at least one qualifier to use with at least one validation checking program, wherein the program is further capable of causing the computer to perform:

determining whether the validation output result satisfies the at least one qualifier provided with the validation checking program producing the output result, wherein

metadata for the output result is included in the index if the output result satisfies the qualifier.

- 52. The program of claim 51, wherein metadata for the content page at the addressable location is not included in the index if the validation output result does not satisfy the qualifier.
- 53. The program of claim 43, wherein the program is further capable of causing the computer to perform:

determining a format of the accessed content page;

selecting one of a plurality of parsers capable of parsing the determined format; and

parsing the content page using the selected parser, wherein the metadata to add to the index is generated from the parsed content page.

54. The program of claim 43, wherein the program is further capable of causing the computer to perform:

determining a parser capable of parsing an embedded file referenced in the content page;

parsing the content of the referenced embedded file; and

generating metadata for the parsed content of the embedded file to add to the index.

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55. The program of claim 54, wherein the embedded file is encoded in a multimedia format.

56. The program of claim 43, further comprising:

distributing the program to content providers capable of accessing and generating metadata for content provider data repositories using the accessed customizable settings; and

collecting metadata data gathered from multiple content providers using the collection tool to gather metadata on their data repositories.

57. The program of claim 56, further comprising:

receiving an electronic subscription from content providers to use the program to gather and provide metadata.

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EXAMINER'S AMENDMENT

The following is an examiner's statement of reasons for allowance:

Independent Claims 5, 8, 11, 25, 28, 31, 43, 46, 49 among other things teach the limitation "accessing customizable settings capable of being customized by the content provider, wherein the customizable settings provide an addressable location of at least one content page in the data repository a parameter" further defining that parameter as a query term and password and validation checking programs

The prior art does not teach the cited limitation.

The combination of the dependent claims 2, 4, 6-7, 9-10, 12-20, 22, 24, 26-27, 29-30, 32-38, 40, 42, 44-45, 47-48, 50-52 further define and detail the invention.

The Koster reference taught generating metadata from customizable instructions but did not detail the customizable instructions past allow or disallow parameters with addressable locations or agent types. Koster and Emens together taught generating metadata from many customizable sites but failed to teach query terms and error checking programs at indicated in the customizable settings.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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CORRESPONDANCE INFORMATION

Any inquiry concerning this communication or earlier communications from the

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examiner should be directed to Benjamin R Bruckart whose telephone number is (703)

305-0324. The examiner can normally be reached on 8:00-5:30PM with every other

Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Hosain Alam can be reached on (703) 308-6662. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

Benjamin R Bruckart

Examiner

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August 19, 2004

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SUPERVISORY PATENT EXAMINER